

Reply to Office Action dated December 14, 2007

REMARKS

Claims 1-7 and 13-22 are pending in this application. By this Amendment, claims 1, 4 and 13 are amended. Various amendments are made for clarity and are unrelated to issues of patentability.

The Office Action rejects claims 4-7 under 35 U.S.C. §112, first paragraph, as failing to satisfy the written description requirement. The Office Action states that there is no support in the specification for a multi-chip module being mounted on a printed circuit board and input/output lines are not formed directly on the PCB. Paragraph [0025] of the present specification (relating to the convention art) relates to the frame memories 33 located around system control chips 26 mounted on a PCB in a form of an individual package and that I/O signal lines connecting the at least one control chip and the at least one memory are mounted on the PCB. Paragraph [0082] of the present specification also describes that because the frame memory and control chip are mounted on a single MCM chip, the single MCM chip is mounted on a PCB, and I/O signal lines connecting the at least one control chip and at least one memory are not formed directly on the PBC but are formed within the MCM single package. Accordingly, applicants respectfully submit that the specification provides a full, clear and concise description to enable one skilled in the art to make or use the features of independent claim 4 (and its corresponding dependent claims). Withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 1-7 and 13-20 under 35 U.S.C. §103(a) over Applicants Admitted Prior Art (hereafter AAPA) in view of U.S. Patent 5,876,536 to Kumar. The Office

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Action also rejects claims 4-7 and 21-22 under 35 U.S.C. §102(a) by AAPA. The rejections are respectfully traversed with respect to the pending claims.

Independent claim 1 recites a multi-chip module in which at least one control chip having a control circuit for controlling the PDP, and at least one memory are mounted on a single package, wherein the multi-chip module is mounted on a printed circuit board (PCB) of a control board, and wherein the multi-chip module includes a plurality of green tapes, and input/output (I/O) lines coupling the at least one control chip and the at least one memory are formed in the plurality of green tapes within the single package.

The applied references do not teach or suggest all the features of independent claim 1. The Office Action (on page 3) states that AAPA does not disclose that a multi-chip module includes a plurality of green tapes. The Office Action then relies on Kumar's col. 1, lines 14-26 as teaching circuit boards being made of tapes called green. However, Kumar relates to providing green tape stacks having improved dimensional control. Kumar only relates to green tapes being used during a process of forming a printed circuit board. This differs from independent claim 1 relating to a plasma display panel (PDP). Accordingly, Kumar has a different field of invention as compared to independent claim 1 (and the other claims) and the present specification.

Kumar does not teach or suggest a single package (as in independent claim 1). Therefore, Kumar does not teach or suggest that the multi-chip module includes a plurality of green tapes, and input/output (I/O) lines coupling the at least one control chip and the at least one memory are formed in the plurality of green tapes within the single package, as recited in independent

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claim 1. Thus, AAPA and Kumar do not teach or suggest all the features of independent claim 1.

Independent claim 1 therefore defines patentable subject matter.

Independent claim 4 recites a control board, a plurality of driving units and a PDP. Independent claim 4 further recites that the multi-chip module is mounted on a printed circuit board (PCB), and input/output (I/O) lines connecting the at least one control chip and the at least one memory are not formed directly on the PCB but are formed within the single package.

For at least similar reasons as set forth above, AAPA and Kumar do not teach or suggest all the features of independent claim 4. Independent claim 4 therefore defines patentable subject matter.

Independent claim 13 recites a control board having a circuit board and a multi-chip module on the circuit board, the multi-chip module including a plurality of control chips and a plurality of memories on a single package, the control chip including a control circuit to control a PDP. Independent claim 13 also recites the multi-chip module includes a circuit package having a plurality of circuit layers, and wherein at least one control chip and at least one memory are formed on a front of the circuit package and input/output (I/O) lines are formed through the plurality of circuit layers, and the I/O lines connect the at least one control chip and the at least one memory within the single package.

For at least similar reasons as set forth above, AAPA and Kumar do not teach or suggest at least these features of independent claim 13. Thus, independent claim 13 defines patentable subject matter.

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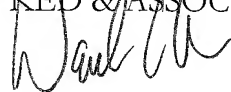
For at least the reasons set forth above, each of independent claims 1, 4 and 13 defines patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied references.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-7 and 13-22 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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